

Title (en)

MASS ANALYZER CAPABLE OF PARALLEL PROCESSING ONE OR MORE ANALYTES

Title (de)

MASSENANALYSIERER MIT DER FÄHIGKEIT ZUR PARALLELEN VERARBEITUNG EINES ODER MEHRERER ANALYTE

Title (fr)

ANALYSEUR DE MASSE POUVANT TRAITER EN PARALLELE UNE OU PLUSIEURS SUBSTANCES A ANALYSER

Publication

EP 1609166 A2 20051228 (EN)

Application

EP 04749451 A 20040326

Priority

- US 2004009355 W 20040326
- US 24932003 A 20030331
- US 64359103 A 20030819

Abstract (en)

[origin: US2005040329A1] An improved mass analyzer capable of parallel processing one or more analytes is set forth. The mass analyzer comprises a mass filter unit having a plurality of ion selection chambers disposed in parallel with one another. Each of the plurality of ion selection chambers respectively includes an ion inlet lying in an inlet plane and an ion outlet lying in an outlet plane. The mass analyzer further includes a plurality of electrodes disposed in the ion selection chambers and at least one RF signal generator connected to the plurality of electrodes to produce a non-rotating, oscillating electric field in each ion selection chambers. A plurality of ion injectors are each coupled to inject an ion beam into the ion inlet of a respective ion selection chambers. The ions meeting predetermined m/Q requirements pass through the ion selection chambers to contact corresponding detection surfaces of an ion detector array. The mass filter array may also be constructed so that at least one pair of ion selection chambers share at least one common field generating electrode.

IPC 1-7

H01J 49/00

IPC 8 full level

H01J 49/04 (2006.01); **H01J 49/34** (2006.01); **H01J 49/42** (2006.01)

CPC (source: EP US)

H01J 49/004 (2013.01 - EP US)

Citation (search report)

See references of WO 2004093123A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

US 2005040329 A1 20050224; **US 7057167 B2 20060606**; EP 1609166 A2 20051228; EP 1609169 A2 20051228; WO 2004093123 A2 20041028; WO 2004093123 A3 20070208; WO 2004093124 A2 20041028; WO 2004093124 A3 20050804

DOCDB simple family (application)

US 94046604 A 20040914; EP 04749451 A 20040326; EP 04749452 A 20040326; US 2004009355 W 20040326; US 2004009356 W 20040326